

a cutting member connected to the cutting head, the cutting member formed of a strip of material including a thickness in the range of 0.005 inches to 0.0015 inches and a width in the range of 0.375 inches to 0.625 inches, a first end, a second end, and a length and a width, the first end of the cutting member secured to the cutting head, the length of the cutting member positioned about the first set of returns and the second set of returns in a serpentine configuration, a leg of the cutting member extending across an aperture formed through the cutting head and the second end of the cutting member secured to the cutting head; and

a cutting member tensioning device disposed between and adjustably engaging the first head member and second head member for adjusting a distance between the first set of returns and the second set of returns and tensioning the cutting member.

- 2. (Currently Amended) The cutting head assembly of Claim 1
 wherein the cutting member tensioning device further comprises one or more
 cutting member tensioning screws disposed between and threadedly engaging
 the first head member and second head member for adjusting a distance between
 the first set of returns and the second set of returns for tensioning the cutting
- 6 member.





1

2

3

4

1

2

3

4

5

1

2

3

4



- 3. (Original) The cutting head assembly of Claim 1 wherein the first set of returns and the second set of returns each comprise a height substantially equal to a width of cutting member for transferring a substantially equal force across the width of the cutting member.
- 4. (Currently Amended) The cutting head assembly of Claim 1 wherein the first set of returns and the second set of returns each further comprise a bearing face lying in a plane substantially perpendicular to a longitudinal axis of the leg of the cutting member extending across an the aperture formed through the cutting head.
 - 5. (Original) The cutting assembly of Claim 1 wherein the cutting member tensioning device adjusts the distance between the first set of returns and the second set of returns imparting a tensive force in excess of 100,000 pounds per square inch along the cutting member.
- 6. (Currently Amended) The cutting assembly of Claim 1 wherein 1 the cutting member tensioning device further comprises a screw including a 2 longitudinal axis, the longitudinal axis of the screw oriented along a plane 3 substantially parallel to a longitudinal axis of the leg of the cutting member 4 extending across an the aperture formed through the cutting head, the screw 5 adjustably attaching the first set of returns and the second set of returns for 6 adjusting a distance between the first set of returns and the second set of returns 7 for tensioning the cutting member along a plane substantially parallel to the 8 longitudinal axis of the screw. 9
- 7. (Currently Amended) The cutting head assembly of Claim 1
 wherein the cutting member tensioning device further comprises a pair of screws,
 each of the pair of screws including a longitudinal axis, the longitudinal axis of
 each of the pair of screws oriented along a plane substantially parallel to a
 longitudinal axis of the leg of the cutting member extending across an the

Response to Office Action - 4
Docket No ACE106.02





aperture formed through the cutting head, and each of the pair of screws
adjustably attaching the first set of returns and the second set of returns for
adjusting a distance between the first set of returns and the second set of returns
for tensioning the cutting member along a plane substantially parallel to the
longitudinal axis of each of the pair of screws.

8. (Currently Amended) A cutting head assembly comprising: a cutting head including a first head member including a first set of returns, the first head member opposingly and adjustably connected to a second head member including a second set of returns;

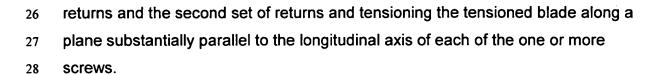
a tensioned blade formed of a strip of material, the first head member tensioned blade including a first end, a second end, a length, a longitudinal axis and a width, the tensioned blade positioned about the first set of returns and the second set of returns in a serpentine configuration, a leg of the tensioned blade extending across an aperture formed through the cutting head, the first end of the tensioned blade secured to the cutting head by a first end securing member and the second end of the tensioned blade secured to the cutting head by a second end securing member;

the first set of returns each including a face that is oriented substantially perpendicular to the longitudinal axis of the tensioned blade for exerting a substantially equal tensive force across a full width of the tensioned blade, substantially reducing stress risers in the tensioned blade;

the second set of returns each including a face that is oriented substantially perpendicular to the longitudinal axis of the tensioned blade for exerting a tensive force across a full width of the tensioned blade, substantially reducing stress risers in the tensioned blade; and

a tensioning device including one or more screws disposed between and adjustably engaging the first head member and the second head member, each of the one or more screws including a longitudinal axis oriented along a plane substantially parallel to a longitudinal axis of the leg of the tensioned blade extending across the aperture, for adjusting a distance between the first set of





9

1

2

3

4

1

9. (Previously Amended) The cutting head assembly of Claim 8 wherein the first set of returns and the second set of returns each comprise a height substantially equal to the width of the tensioned blade for transferring a substantially equal force across the width of the tensioned blade.

10. (Cancelled)